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| APPLICATION NO. | FILING DATE | | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|-----------------------|--------------|------------|----------------------|---------------------|------------------|--|
| 10/800,738 | 8 03/16/2004 | | Kimikazu Matsumoto | 089367-0125 | 1166 | |
| 22428 | 7590 | 11/19/2004 | | EXAMINER | | |
| FOLEY AN SUITE 500 | D LARI | ONER | KIM, RIC | KIM, RICHARD H | | |
| 3000 K STRE | EET NW | | ART UNIT | PAPER NUMBER | | |
| WASHINGT | | 20007 | 2871 | | | |

DATE MAILED: 11/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| c | | Application | Application No. Applica | | ant(s) | | | |
|--|--|--|---|---|--------|--|--|--|
| | | 10/800,7 | 38 | MATSUMOTO, KIMIKAZU | | | | |
| | Office Action Summary | Examine | , : | Art Unit | | | | |
| | | Richard H | | 2871 | | | | |
| Period for | The MAILING DATE of this communicate Reply | ion appears on the | e cover sheet with the o | correspondence ad | ddress | | | |
| THE M - Extens after S - If the p - If NO p - Failure Any re | PRTENED STATUTORY PERIOD FOR IAILING DATE OF THIS COMMUNICATION of time may be available under the provisions of 37 IX (6) MONTHS from the mailing date of this communication of reply specified above is less than thirty (30) date of the provision of the provisio | TION. CFR 1.136(a). In no evation. ys, a reply within the staty period will apply and working statute, cause the app | ent, however, may a reply be tinutory minimum of thirty (30) day ill expire SIX (6) MONTHS from lication to become ABANDONE | mely filed ys will be considered time the mailing date of this of ED (35 U.S.C. § 133). | | | | |
| Status | | | | | | | | |
| 1) 🗌 🛚 | Responsive to communication(s) filed on | | | | | | | |
| 2a) <u></u> □ |) This action is FINAL . 2b) This action is non-final. | | | | | | | |
| ,— | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | | | |
| Dispositio | on of Claims | | | | | | | |
| 5)□ (6)⊠ (7)□ (| Claim(s) 1-8 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. Claim(s) is/are allowed. Claim(s) 1-8 is/are rejected. Claim(s) is/are objected to. | | | | | | | |
| Application | on Papers | | | | | | | |
| 9)□ T | he specification is objected to by the Ex | xaminer. | | | | | | |
| |)⊠ The drawing(s) filed on <u>16 <i>March 2004</i></u> is/are: a)⊠ accepted or b)⊡ objected to by the Examiner. | | | | | | | |
| | Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | | |
| | Replacement drawing sheet(s) including the he oath or declaration is objected to by | • | | - | • • | | | |
| Priority u | nder 35 U.S.C. § 119 | | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | | | |
| | | | | | | | | |
| Attachment(| s) | | | | | | | |
| 1) Notice | of References Cited (PTO-892) | 240) | 4) Interview Summary | / (PTO-413) | | | | |
| 3) 🛛 Inform | of Draftsperson's Patent Drawing Review (PTO-sation Disclosure Statement(s) (PTO-1449 or PTO No(s)/Mail Date 3/16/04. | | Paper No(s)/Mail D 5) Notice of Informal F 6) Other: | | O-152) | | | |

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DETAILED ACTION

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over admitted prior art (AAPA) in view of Choi et al. (US 6,429,918 B1).

Referring to claims 1 and 5, AAPA discloses a device and method comprising a pair of substrate (Fig. 17, ref. 200, 100); a liquid crystal sealed between the pair of substrates (300); a plurality of data lines and a plurality of scanning lines which are arranged so as to intersect each other on one surface of a first of the pair of substrates (Fig. 16, ref. 102, 106), a switching element having an electric current path, one end of which is connected to a corresponding one of the data lines, and having a control terminal which is connected to a corresponding one of the scanning lines (Fig. 16, res. 105), and having a control terminal which is connected to a corresponding one of the scanning lines (specs, page 3, lines 11-18); a pixel electrode which is provided above the data lines via an insulation film (112), and is connected to the other end of the electric current path of the switching element (Fig. 16, ref. 112); a common electrode which opposes that data line via the insulation film (111); a black matrix which is arranged on a second of the pair of substrates in a predetermined manner (202), the black matrix being covered by a flattening film (204). However, the reference does not disclose that the common electrode has slits in portion overlapping the data line to generate an electric field between the pixel electrode;

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and a first conductive film provided on the flattening film so as to oppose the data lines via the slits, the first conductive film being set to a common electric potential with the common electrode, wherein the first conductive film overlaps the portions of the common electrode wherein the slits are formed, and the first conductive film overlaps the black matrix, wherein the first conductive film has a pattern which is almost the same as that of the black matrix, wherein the first conductive film has a width narrower than a width of the black matrix.

Choi et al. discloses a device wherein the common electrode has slits in portions overlapping the data line to generate an electric field between the pixel electrode (col. 5, lines 14-16); and a first conductive film provided on a flattening film so as to oppose the data line (37), the first conductive film being set to a common electric potential with the common electrode (col. 5, lines 1-4), wherein the first conductive film overlaps the portions of the common electrode wherein the slits are formed (16a, 37), and the first conductive film overlaps the black matrix (33).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ a common electrode having slits in portions overlapping the data line to generate an electric field between the pixel electrode; and a first conductive film provided on the flattening film so as to oppose the data lines via the slits, the first conductive film set to a common electric potential with the common electrode, wherein the first conductive film overlaps the portions of the common electrode wherein the slits are formed, and the first conductive film overlaps the black matrix since one would be motivated to prevent light leakage (col. 2, lines 13-18). Furthermore, although the reference does not show that that the first conductive film

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opposes the data lines via the slit portions, having the data lines on a lower plane than the

common signal lines are well known in the art.

Referring to claims 2-4 and 7-8, AAPA and Choi et al. disclose the device and method previously recited. Choi et al. further discloses that the first conductive film has a pattern that is

almost the same as that of the black matrix (37, 33), wherein the first conductive film is made of

a transparent metal layer or an opaque metal layer (col. 4, lines 65-66). However, the reference

does not disclose that the first conductive film is made of ITO or is made of a material having a

low resistance.

conductive.

It would have been obvious to one having ordinary skill in the art at the time the invention was made for the conductive film to be made of ITO since ITO is well known in the art to be used as a conductive film for its transparent and high conductive properties. Further, it would have been obvious to one having ordinary skill in the art at the time the invention was made for the material to have low resistance since a device utilized as a conductive medium, as the conductive film is, is well known in the art to having a low resistance so as to be highly

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard H Kim whose telephone number is (571)272-2294. The examiner can normally be reached on 9:00-6:30 M-F.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert H Kim can be reached on (571)272-2293. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Richard H Kim Examiner Art Unit 2871

RHK

TARIFUR R. CHOWDHURY
PRIMARY EXAMINER